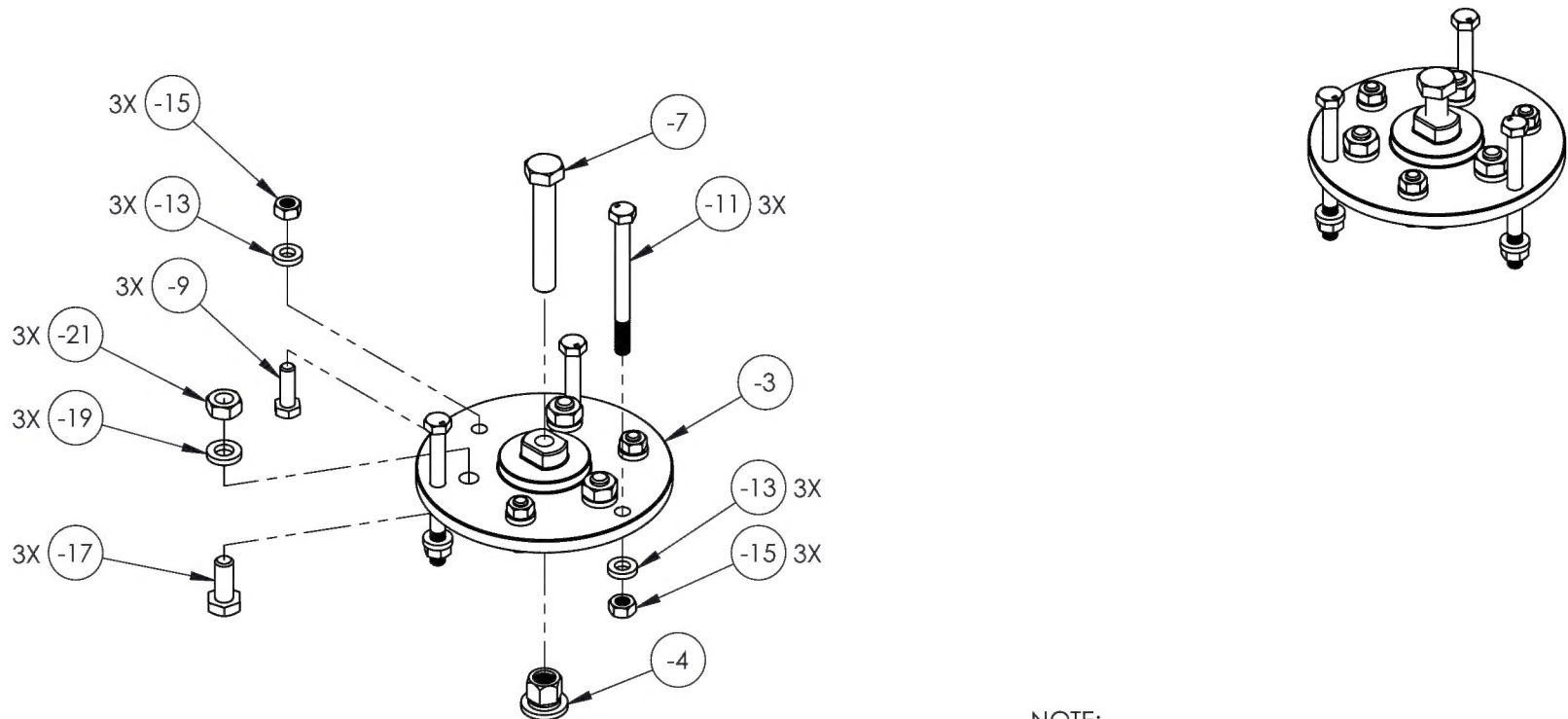


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0126	UPDATED TO NEW STANDARD. ADDED EC635, H135 TO USED ON MODELS. <b>-3 -5 -7</b> ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D. <b>-3</b> CH'D DIMS WAS $\varnothing 5.508$ IS $\varnothing 5.50$ , WAS $\varnothing .985$ IS $\varnothing .99$ , DELETED DIMS $3X \ 120^\circ$ , $6X \ 120^\circ$ . ADDED DIM $60^\circ$ TYP. <b>-4</b> ADDED TO BOM. ADDED DRAWING. <b>-5</b> CH'D DIM WAS $\varnothing .998$ IS $\varnothing 1.00$ , WAS $\varnothing .693$ IS $\varnothing .69$ , WAS $.098$ IS $.10$ , WAS $.125$ IS $.13$ , WAS $.484$ IS $.48$ , WAS $\varnothing .073$ IS $\varnothing .07$ . <b>-7</b> CH'D DESCRIPTION WAS HEX HEAD CAP SCREW IS BOLT. CH'D B/O REF WAS #91280A010 IS (FASTENAL #0159018). CH'D DIMS WAS $2.925$ IS $2.93$ , WAS $\varnothing .375$ DEPTH $.125$ IS $\varnothing .20$ $\nabla .13$ , WAS $M12 \times 1.75$ IS ( $M12 \times 1.75 - 6h$ ). <b>-9</b> CH'D B/O REF WAS #91310A535 IS (#90854A167). <b>-11</b> CH'D B/O REF WAS #91310A562 IS (#91280A560). <b>-15</b> CH'D B/O REF WAS #90685A045 IS (#90591A161). <b>-17</b> CH'D B/O REF WAS #91310A626 IS (#90854A189). <b>-21</b> CH'D B/O REF WAS #90685A046 IS (#92497A450).	8/29/2016	DEW	JAG



NOTE:  
REFERENCE AIRBUS T/N: 1X56137180.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-3	1	PLATE	1018/1020 CR		2
	X		-4	1	SWIVEL PAD ASSEMBLY			3
	1		-5		PAD	1018/1020 CR		4
			-7	1	BOLT	STEEL	M12 X 1.75mm X 75mm (FASTENAL #0159018) MODIFIED	5
		B/O	-9	3	HEX HEAD CAP SCREW	STEEL	M8 X 1.25mm x 25mm (MCMaster-CARR #90854A167)	1
		B/O	-11	3	HEX HEAD CAP SCREW	STEEL	M8 X 1.25mm X 90mm (MCMaster-CARR #91280A560)	1
		B/O	-13	6	FLAT WASHER	STEEL	M8 (MCMaster-CARR #98035A105)	1
		B/O	-15	6	HEX NUT	STEEL	M8 X 1.25mm (MCMaster-CARR #90591A161)	1
		B/O	-17	3	HEX HEAD CAP SCREW	STEEL	M10 X 1.5mm (MCMaster-CARR #90854A189)	1
		B/O	-19	3	FLAT WASHER	STEEL	M10 (MCMaster-CARR #98035A106)	1
		B/O	-21	3	HEX NUT	STEEL	M10 X 1.5mm (MCMaster-CARR #92497A450)	1
	1		-23		SWIVEL NUT	STEEL	M12 X 1.75 (CARR LANE #CLM-12-SN) MODIFIED	3
	ASSY -4							

**DART AEROSPACE**

**PULLER**

DWG NO. **RBE1X56-137-180**

REV **2**

<b>MAT'L</b> <b>HEAT TREAT</b> <b>FINISH</b> <b>SPEC</b>	<b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b> <b>.XXX ± .005 FRACTIONS ± 1/8</b> <b>.XX ± .01 ANGLES ± 5°</b> <b>.X ± .1 SURFACES = 125°</b>
<b>DRAWN BY:</b> CLOUGH <b>CHECKED:</b> DUERFELDT <b>OPPS APPR:</b> ANDERSON <b>QA APPR:</b> LINDSAY <b>APPROVED:</b> GILBERT	<b>1. BREAK ALL SHARP EDGES .015 x 45° OR .015R</b> <b>2. DIMENSIONAL LIMITS APPLY AFTER PLATING</b> <b>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</b> <b>USED ON MODEL</b> <b>EC135, EC635, H135</b>

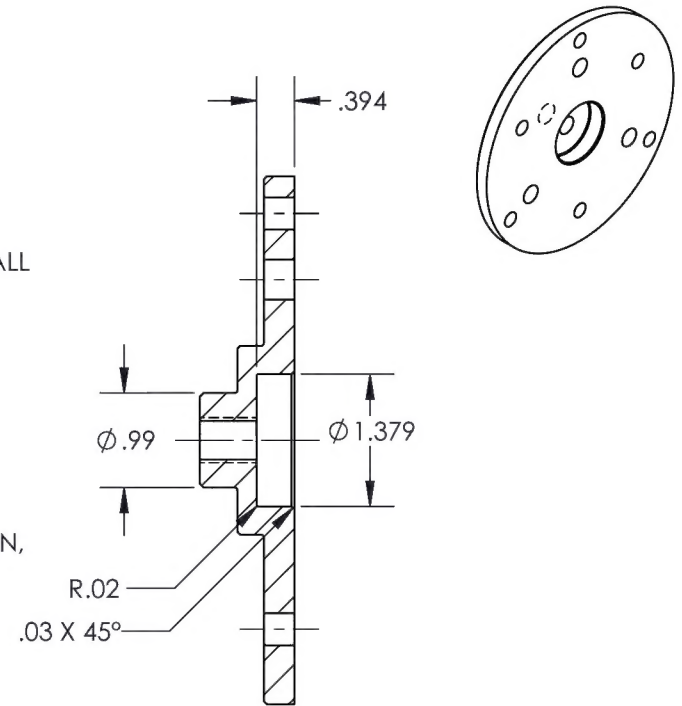
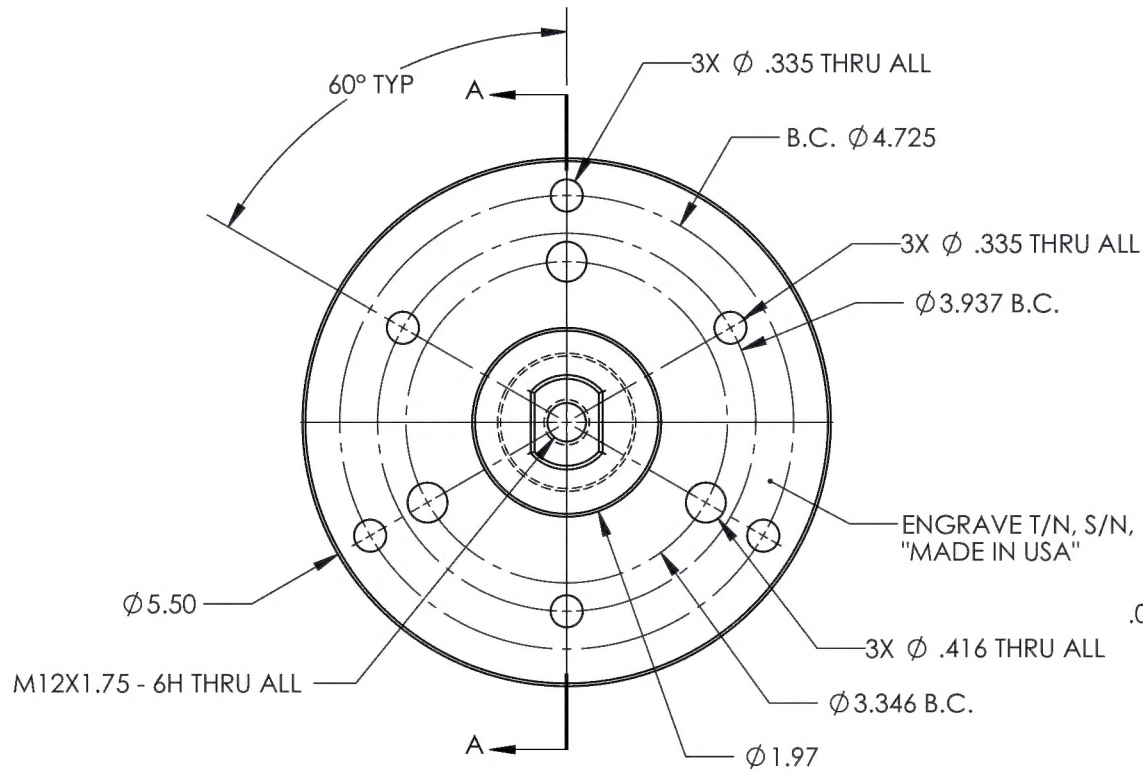
SCALE **1:4**

DATE **7/8/2010**

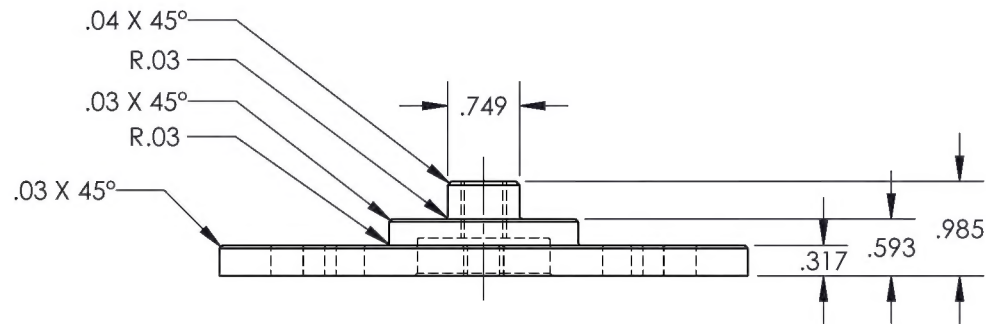
SHEET **1 OF 5**

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
2	16-0126	-3 CH'D DIMS WAS $\phi$ 5.508 IS $\phi$ 5.50. WAS $\phi$ .985 IS $\phi$ .99. DELETED DIMS 3X 120°, 6X 120°. ADDED DIM 60° TYP. ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D.	8/29/2016	DEW
				JAG



SECTION A-A

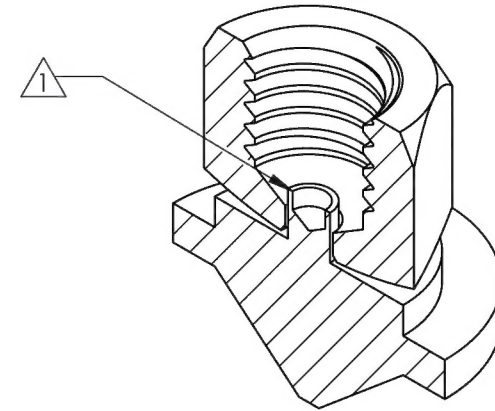
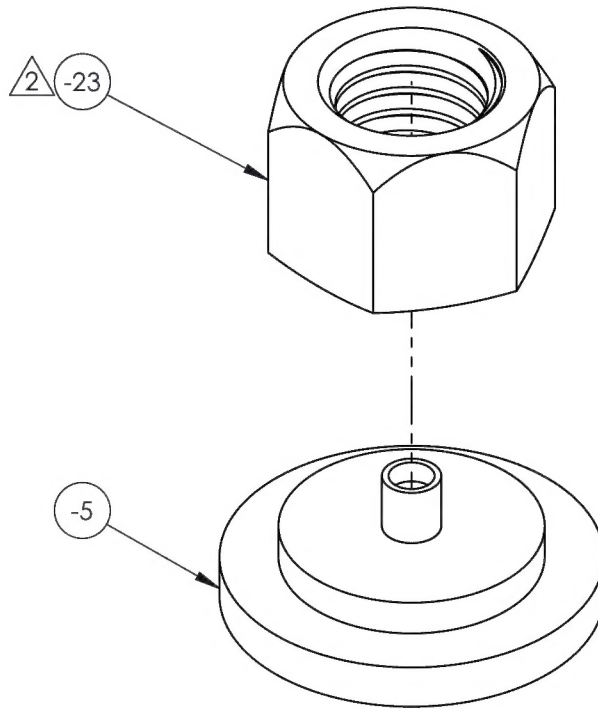


(-3)  
PLATE

<b>DART AEROSPACE</b>	
TITLE <b>PULLER</b>	
DWG NO. <b>RBE1X56-137-180-3</b>	REV <b>2</b>
MAT'L 1018/1020 CR HEAT TREAT FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: <b>CLOUGH</b>	USED ON MODEL
CHECKED: <b>DUERFELDT</b>	EC135, EC635, H135
OPPS APPR: <b>ANDERSON</b>	
QA APPR: <b>LINDSAY</b>	
APPROVED: <b>GILBERT</b>	
SCALE <b>1:2</b>	DATE <b>7/8/2010</b>
SHEET 2 OF 5	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0126	4 ADDED TO BOM. ADDED DRAWING.	8/29/2016	DPD	JAG



**NOTE:**

- 1 PEEN OVER LIP OF -5 PAD AFTER ASSEMBLY WITH -23 SWIVEL NUT. MUST ROTATE FREELY.
- 2 REMOVE OEM SWIVEL FOOT FROM -23 SWIVEL NUT IN A WAY TO NOT CAUSE DAMAGE TO HEX NUT PORTION.

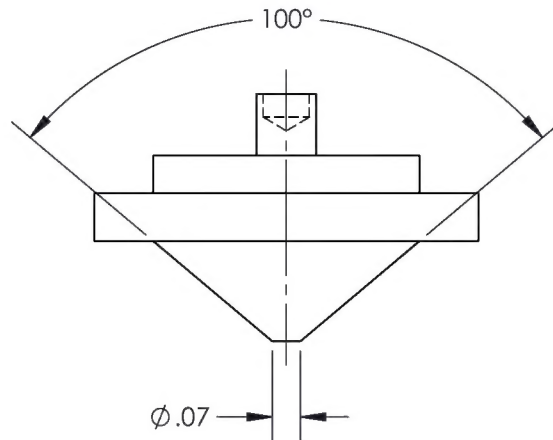
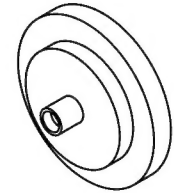
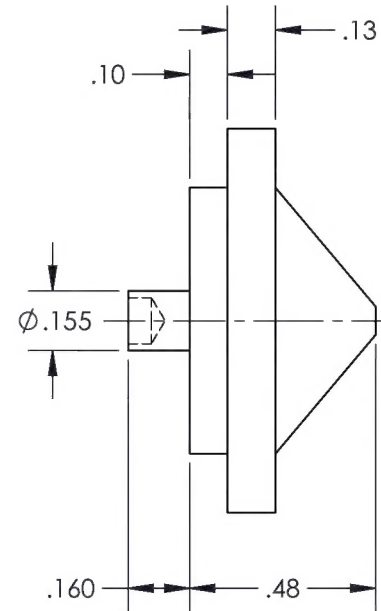
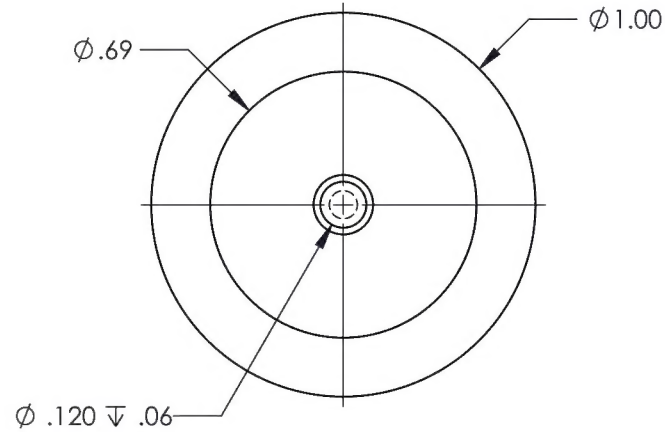


TITLE		PULLER	
DWG NO.		RBE1X56-137-180-4	REV 2
MAT'L		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT FINISH		DIMENSIONS ARE IN INCHES	
SPEC		.XXX ± .005 FRACTIONS ± 1/8	
		.XX ± .01 ANGLES ± 5°	
		.X ± .1 SURFACES = 125°	
DRAWN BY: CLOUGH		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED: DUERFELDT		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY		USED ON MODEL	
APPROVED: GILBERT		EC135, EC635, H135	
SCALE	2:1	DATE	7/8/2010
		SHEET 3 OF 5	

-4  
SWIVEL PAD ASSEMBLY

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
2	16-0126	-5 CH'D DIM WAS Ø.998 IS Ø 1.00, WAS Ø.693 IS Ø.69, WAS .098 IS .10, WAS .125 IS .13, WAS .484 IS .48, WAS Ø.073 IS Ø.07, ADDED FINISH SPEC QMSI-6.2.2 B.O. REV D.	8/29/2016	DEW
				JAG

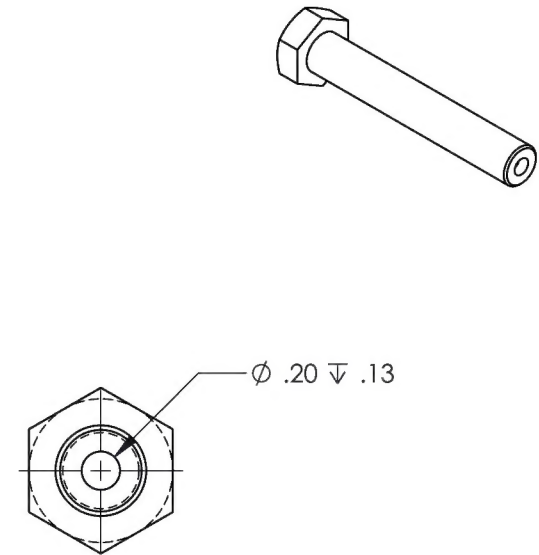
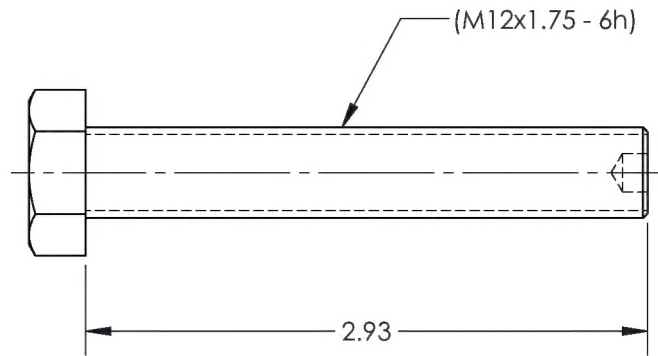


(-5)  
PAD

<b>DART AEROSPACE</b>	
TITLE <b>PULLER</b>	
DWG NO. <b>RBE1X56-137-180-5</b>	REV <b>2</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 2:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 7/8/2010	USED ON MODEL
SHEET 4 OF 5	EC135, EC635, H135

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0126	-7 CH'D DIMS WAS 2.925 IS 2.93. WAS $\varnothing$ .375 DEPTH .125 IS $\varnothing$ .20 $\nabla$ .13. WAS M12 X 1.75 IS (M12 X 1.75 - 6h). ADDED SPEC QMSI-6.2.2, B.O. REV D.	8/29/2016	DEW	JAG



(-7)

BOLT

<b>DART AEROSPACE</b>	
TITLE <b>PULLER</b>	
DWG NO. <b>RBE1X56-137-180-7</b>	REV <b>2</b>
MAT'L STEEL HEAT TREAT FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$ .005 FRACTIONS $\pm$ 1/8 .XX $\pm$ .01 ANGLES $\pm$ 5° .X $\pm$ .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: CLOUGH	
CHECKED: DUERFELDT	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	EC135, EC635, H135
SCALE 1:1	DATE 7/8/2010
SHEET 5 OF 5	